Defense Health Information Management System (DHIMS)
Responses to Questions Posted to the June 20th AHLTA Webhall

AHLTA versus VistA

- **Why do we use AHLTA instead of VISTA?**

AHLTA and VistA have been built for two different business practices. The DoD developed AHLTA to allow migration away from the old CHCS I system of "local only" freestanding data bases, which could not share information with one another. AHLTA is the first system to allow for the central storage of standardized electronic health record (EHR) data that is available for "worldwide" sharing of patient information. AHLTA has allowed this enterprise wide sharing for over 4 years now. VistA in its current form is tailored more for local or regional healthcare with a generally static population of both patients and providers. The DoD's AHLTA system was developed to support a "globally transient" population of patients and providers. DoD recognizes the strengths of VistA and we are diligently working towards adding those strengths into AHLTA.

- **Can AHLTA and VISTA "talk" to each other?**

Yes, AHLTA and VistA do share significant EHR information. The Bidirectional Health Information Exchange (BHIE) allows for information sharing of lab/radiology results, medications, allergies, procedures, problems, encounter notes, other clinical notes, vital signs, drug allergies and anatomic pathology/microbiology lab results.

AHLTA 3.3

- **What is the site specific schedule for rollout of AHLTA 3.3?**

The new AHLTA 3.3 application is currently in field beta testing. The goal is to have 3.3 deployed to all sites by the end of this calendar year. A site by site, specific schedule will be developed between the Program Office and the Services and released once the software is available for deployment.

INTERFACE ISSUES

- **Medication reconciliation is a Joint Commission safety goal new to 2008 and a critical process in the care of Warriors in Transition. AHLTA's medication profile cannot reliably be updated; in some instances it auto-populates data that is expired or removed, and prescriptions entered outside our MTF cannot be deleted from the list even though the patient is no longer taking the drug. When do we foresee this issue being resolved so we can use our electronic health record to assist us in meeting our Joint Commission standards and MEDCOM directives?**

This issue should be mitigated with AHLTA version 3.3, which also includes a new Discontinued Medications functionality. Build 3.3 is currently in field beta testing. The goal is to have 3.3 deployed to all sites by the end of this calendar year.

- **When will allergy synch work so that providers can rely on the data in AHLTA or from CHCS Legacy?**

Allergy synch currently works in AHLTA and the information in AHLTA is accurate. Changes to allergy data made in AHLTA are retained. However, we are still evaluating how to address the issues within CHCS.

- **What causes the demographic inconsistencies across CHCS and AHLTA?**

The official source of demographic information comes from DEERS. AHLTA pulls the information from DEERS. CHCS allows for individual local input, which could cause discrepancies. The MHS plan to replace or modernize legacy systems will help us address these issues.

TECHNOLOGY

- **Is there an Army directive for providers to have tablet PCs? If so, when?**

This is an Army specific question. Please contact your AHLTA Service representative.

DUPLICATE RECORDS/DATA LOSS/PATIENT SAFETY

- **For duplicate patient records, how can one unique SSN possess more than one record?**

In the DoD system we routinely have family members that share the sponsors SSN for benefits. CHCS utilizes the sponsors SSN therefore it is not a unique identifier. AHLTA has developed a unique identifier that will be used across the board when legacy systems are fully modernized or replaced.

SYSTEM ERRORS

- **Patients often become "stuck" erroneously in an "inpatient" status in AHLTA, preventing the input of further relevant documentation in the outpatient electronic record. What is the MHS doing to resolve this systemic programmatic issue and what is the target date for resolution?**

Currently, the admission, discharge and transfer is performed by legacy CHCS. Therefore an inpatient has to be discharged in CHCS to allow viewing from AHLTA. DHIMS is still evaluating how to address this issue within the system in the very near term. We are also ensuring that this issue gets addressed in the MHS plan to replace or modernize legacy systems.

- **The issue of the memory exception error was first reported by BAMC in Oct 2006. The response from the Program Office was to limit data entry into a single encounter to max 500Kb. This is a significant problem for our Warriors in Transition who often have large records due to their frequent and complex care. What is the alternative method for entry of clinical information into AHLTA if the information exceeds 500Kb?**
    - **What safeguards are in place to warn providers when the 500Kb threshold is approaching?**
    - **When will this systemic programmatic problem be resolved so that we can enter all clinical data into the record risk free?**

The new AHLTA 3.3 application provides smoother copying and importing into the record - even under current size constraints. The system will automatically convert it to the proper file type and compress it, if necessary. This enables many more images to easily be imported. When we deploy AHLTA 3.3, the application will present a warning message to the user when an image exceeds the 500kb limit.

The capability to manage Artifacts and Images (A&I) is currently in development and is planned for initial deployment by the end of December 2009. This will allow healthcare providers to register, query, retrieve, view, and retain A&I in a repository.

- **Some patients' records exhibit the memory exception error, even though the record is small and the encounters in it are also less than 500Kb each. Why does this happen?**

This exception error "can" occur as a result of memory leaks induced by use of the Previous Encounters module. However, a correction has been deployed Enterprise-wide for past discovered memory leak issues. If this is a current issue for you please report it to your local help desk support staff.

CLINICAL DOCUMENTATION

- **Is there a way to arrange clinical notes, possibly by time as well as date? Can specialty be added to the list of entries for clinical notes?**

The current AHLTA application arranges clinical notes by date but does not arrange clinical notes by time or allow specialties to be added to the list of entries for clinical notes. Arranging clinical notes by specialty and time is an excellent suggestion that we are currently developing for the AHLTA release after AHLTA 3.3.

However, there will be a work around within the new AHLTA 3.3 application. The Title column will be surfaced in the grid view and the end users will be able to include a Specialty Name in the Title using free text. For example, Title: Cardiology – Holter Monitor. By placing the specialty name at the beginning of the title, this will allow users to sort the title column to group documents by specialty.

- **Why can't or when will AHLTA support the insertion of a PDF into the clinical notes area?**

The capability to manage Artifacts and Images (A&I) to include PDFs is currently in development and planned for initial deployment by the end of December 2009.

- **Why are the character limitations so constrained in AHLTA?**

The constrained character limitations in AHLTA were dictated by the technology at that time of development. The character limitation was increased in the new AHLTA 3.3 application which is scheduled for deployment at the end of this calendar year. However there is a work around utilizing the Add Note section which allows unlimited free text.

- **Why do the pull down menus contain items that are never used (e.g., under diet, the drop down includes "cannibalism") but "high fat diet" is not included?**

AHLTA uses MEDCIN, which is a commercial off-the-shelf program, to facilitate the structure terms and notes. There may be many terms that may not have use in your practice. However, high fat diet is included under 'nutritional quality', which is under the diet pull down (node).

- **When will AHLTA alert the provider documenting in A/P that another provider is attempting to take over control of the note and anything documented once this occurs will be lost?**

This has been identified as a new user requirement and a system change request has been submitted for resolution.

PRIVACY/CONFIDENTIALITY

- **How are we ensuring confidentiality of mental health records and preventing unauthorized access to these records?**

Currently, these notes are being marked as sensitive and in order for users to gain access they must "break the glass" and are subject to auditing. DHIMS is working with the behavioral health community to improve the security posture of those records in future AHLTA releases.

- **How does the audit trail work and how can a mental health provider check to ensure inappropriate access has not occurred?**

The system tracks every one who reviews and/or edits a patient record to include records marked sensitive. Audit requests can be made through the local HIPAA office.

- **What is the MHS doing to identify and resolve systemic patient safety issues promptly and definitively?**

Patient safety issues can be identified at any level by contacting the MHS Help Desk. Patient safety issues are given the highest priority and are immediately addressed to the Chief Medical Officer (CMO) within the program office. The CMO then works with the Patient Safety Office for rapid resolution and notification.

- **Why are there persistent systemic programmatic issues that have been reported since 2005 which put patients, providers, and organizations at risk, and cause providers to have to exert constant vigilance and time/resource-consuming work a rounds in order to provide quality patient care in spite of AHLTA?**

In an attempt to meet user needs, since 2005 we have made dramatic changes to the software, hardware and network infrastructure that should become apparent to you with the release of AHLTA 3.3 at the end of this calendar year. We will continue to improve the system in future releases of AHLTA which is part of the MHS plan to modernize and replace legacy systems.

DATA MIGRATION

- **Can a functional data migration portal be established to facilitate uploading of relevant patient specific information?**

The uploading of relevant patient specific information will be addressed with the Artifacts and Images (A&I) application, which is planned for initial deployment by December 2009. This will allow healthcare providers to register, query, retrieve, view, and retain A&I in a repository.

PROFILE ISSUES

- **When will the Army Readiness module be fixed to prevent WIT Providers from having to completely log out and log back on the application between each profiled patient that is also seen and documented on in an encounter?**

The software change to the Army Readiness module is currently under development and we are working aggressively to determine the best way to provide this capability in a timely fashion.

- **Why can't/When will AHLTA keep track of or even notify providers when encounters are created if patients are on a profile, who wrote the profile, what they are on profile for, and how long they have been on a profile?**

The software change for the medical profile capability is currently under development and we are working aggressively to determine the best way to provide this capability in a timely fashion.

IMAGING/DRAWING

- **When will AHLTA effectively support drawing and imaging/image management requirements?**

There will be a drawing tool in the new AHLTA 3.3 application. The capability to manage the Artifacts and Images (A&I) application is currently in development and is planned for initial deployment with the release scheduled for December 2009.

- **Why aren't we pushing hard to get the DFIEA capability out to users when so much positive feedback has been received for the capability?**

DHIMS is working aggressively toward providing the capabilities listed in the DFIEA effort in the Artifacts and Images (A&I) application. DHIMS is evaluating potential courses of action to determine the best way to leverage the DFIEA capability for early deployment to the user community as the interim solution to support management of documents, files, and images. The enterprise capability to manage A&I is currently in development and is planned for initial deployment by the end of December 2009.

BUSINESS PROCESSES

Trouble Tickets

- **Our trouble tickets to the MHS seem to disappear into a black void, from which we receive limited, if any, feedback. What is the average time to resolution of (1) Patient safety trouble tickets and (b) non-patient safety trouble tickets? What is the MHS "standard" for customer feedback and timeliness for resolution of trouble tickets?**

DHIMS provides feedback to the Services on all trouble tickets following the MHS process for notification. The MHS Help Desk processes patient safety (severity 1) trouble tickets within 90 minutes. They are escalated directly to Tier III developer (Northrup-Grumman or SAIC) for resolution with courtesy copy to DHIMS Chief Medical Officer (CMO).

The MHS Help Desk processes (resolves or escalates) non-patient safety trouble tickets in accordance with following contract performance metrics: high priority trouble tickets (severity 1s) within 60-90 minutes, medium priority trouble tickets (severity 2s) within 4-6 hours and low priority trouble tickets (severity 3s) within 2-3 business days. These metrics are consistently met or exceeded. Trouble tickets escalated to Tier III application developers (e.g., Northrup-Grumman or SAIC) are processed/resolved in accordance with current DHIMS sustainment contract with that vendor.

Coding

- **AHLTA does not seem to capture coding to the highest level. Why?**

AHLTA will capture the ICD9 codes as listed next to the diagnosis that you choose in the drop down list. To get a higher level ICD9 code, drill down for more detailed diagnoses. If you mean capturing the highest E&M code, the new AHLTA 3.3 application will do a better job of capturing clinical documentation information for automatic E&M coding. Also, with the current system providers can manually choose E&M codes in the disposition module.

- **Templates may assist in data capture, but how is that being reflected in coding capture?**

Structured data drives the coding calculator. When free text is used, manual selection of an E&M code is necessary in the disposition module of AHLTA. Templates that are developed using the structured data elements have the potential to both code and capture the data.

- **What AIMs notes exist in AHLTA to increase charting and coding efficiency? Is this a widely utilized feature?**

There are numerous AIM forms that were created to increase charting and coding efficiency. Contact your AHLTA clinical champion to find out which AIM forms are best for your specialty or practice. Further, best practices to include information about AIM forms can be found at: www.usafp.org/AHLTA-Information-FAQs.html.

RECURRING AND/OR GENERAL QUESTIONS

System Speed

- **We see the value of an EHR but why is AHLTA so slow? Can we fix this system or do we need to start over?**

DHIMS is committed to doing everything possible to improve the users experience by addressing the speed, reliability, and usability issues of AHLTA. System performance issues are multi-factorial. Areas we are working on include standardizing desktops, adding additional memory and processing, optimizing workflow, reducing the amount of clicks, optimizing queries to the database, working with local base operations on network issues. Some of these issues will be addressed in the new AHLTA 3.3 application which will be deployed by the end of this calendar year. DHIMS will continue to evaluate and improve the system in future releases through the MHS plan to modernize and replace legacy systems.

COST SAVINGS

- **Can MHS provide metrics proving that AHLTA has improved care or reduced costs/saved money?**

Many in the healthcare environment question whether the use of an EHR actually improves care or reduces cost. However, capitalizing on the use of a comprehensive EHR can minimize/reduce redundant healthcare delivery costs.

ADEQUACY OF INFRASTRUCTURE

- **In 2006, on site OJT trainers stated that the servers supporting AHLTA were too small to support the number of providers and the number of beneficiaries – what are your comments regarding the statements made by the trainers?**

The MHS is constantly conducting capacity planning and making necessary upgrades to support the increasing number of users and our beneficiary healthcare information.

ACCOUNTABILITY

- **When will DHIMS/DISA have accountability to the MTFs about changes made on the system, for example the turning off of CHDR/PDTS/VA medication information?**

DHIMS is accountable to the MHS which includes the Service leadership. All software changes are vetted through the MHS communication process which includes the Service CIOs and functional representatives.

MODULES/SPECIALTY FUNCTIONALITY

Physical Examination Results

- **Can we get physical examination results into AHLTA?**

If the question is referring to the DD 2807 and 2808 forms, then we acknowledge the need to include this capability in a future release. DHIMS plans to add this capability in the next release after AHLTA 3.3.

OB Functionality

- **Why can't AHLTA calculate the due date and current gestational age based on the input of the date of the last menstrual period?**

The OB summary will be available in the new AHLTA 3.3 application. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

- **Why doesn't AHLTA have a pregnancy flow sheet, similar to vital signs review section?**

The OB summary will be available in the new AHLTA 3.3 application. Build 3.3 is currently in field beta testing. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

- **This page should show the data from multiple visits, including gestational age, blood pressure, weight, fundal height, cervical exam, and presentation in a single page.**

The OB summary will be in the new AHLTA 3.3 application and will be able to display this information. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

- **The disposition section should default to the 99499 code and automatically enter the 0502F procedure code which is used for the vast majority of obstetric encounters.**

With the new AHLTA 3.3 application, users can set 99499 as a default. It will not

automatically enter 0502F. If this functionality is desired, there is an established system change request process. Please contact your AHLTA service representative for assistance with this process.

Pediatric Functionality
Growth Chart Plotting

- **Users ask "Why does the chart only plot single visit values rather than a longitudinal plot of all values in the vitals section?"**

This will be available in the new AHLTA 3.3 application. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

Readiness Module

- **Are there plans to fix the following issues in the readiness module?**
- **Immunizations are not synchronized with Medpros making that portion of the record useless.**

We are currently working on fixing the readiness module, specifically immunizations, through a Bi-Directional Interface with service specific systems such as Medpros. This Bi-Directional interface is currently in testing and we plan to have this fix in place before the end of this calendar year.

- **When the AHLTA profile module is used consistently on a Soldier, it has provided exceptionally helpful information about the Soldiers true medical fitness. However, the module frequently fails to load and often locks-up the entire program. This section really needs to be corrected.**

Army Readiness/Profiles will be available in the new AHLTA 3.3 application. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

Immunization Module

- **Is the immunization module ready for use? Why do immunizations drop out?**

- **When will immunizations stop disappearing from the Immunization module and/or begin showing up on the Immunizations module once documented?**

The immunization module is currently working in AHLTA; however the data may be incomplete related to the duplicate patient record issue. We are actively working to speed up the process to address this issue. To clarify, immunization information has not been lost, however it will not be viewable until this reconciliation occurs.

Laboratory Functionality

- **Why does the interface with CHCS Lab requires for each different site to have the Lab Test Names in CHCS mapped to the Test Names in AHLTA?**

The laboratory tables in CHCS are not standardized between CHCS sites and therefore requires intensive data mapping into the standard system AHLTA. DHIMS is currently evaluating solutions to improve this issue which includes modernizing and/or replacing our legacy systems.

- **This can lead to variations, from site to site in the way tests are mapped.**

We agree that this leads to variations from site to site because legacy CHCS was originally designed for local standalone implementation. DHIMS is currently evaluating solutions to improve this issue which includes modernizing and/or replacing our legacy systems.

- **If CHCS Lab has a DoD Standardized Lab Test file that every site uses, why has AHLTA has chosen to map to the tests selected by the site?**

The DoD standard lab test file (file 8188.99) is indeed identical at all CHCS sites and updated about twice a year, but it's not the lab test file (file 60) involved with orders, results, etc., that need to be mapped to AHLTA or any other secondary system. The DoD standard lab test file is itself a map to facilitate Laboratory Interoperability among the 103 non-standard lab test files in the CHCS hosts, the analogous test files of the various VistA hosts (the VA's medical system), and those in numerous commercial reference labs' systems. It only represents the subset of tests involved in Lab Interoperability; every lab has many lab test file entries unique to it and therefore not in the DoD standard lab test file at all. Even if it were a superset of all the possible tests, the information in the DoD standard lab test file isn't itself sufficient to fully define the clinical concepts AHLTA uses to identify lab results.

- **How do you ensure that the mapped tests are feeding the correct data into the CDR from site to site?**

A given result is associated with a Numerical Concept Identifier (NCID) in AHLTA, and the specific test is just one of a myriad of parameters used to define that concept. The clinical concept of a Glucose result, for instance, is very different when done on urine versus serum versus CSF versus ascites; may be further differentiated by whether the analysis was done enzymatically, with a dipstick, or a CliniTest; yet more granular if the urine was a random versus 24-hour collection; and whether it's reported in mg/dL, IUs, or semi quantitatively. The mapping process must also take into account that the Glucose test itself may have a different unique identifier (the IEN in CHCS) and/or name at each site—ditto for the different specimens, methods, units, etc. Like LOINC codes, the ultimate intent is to ensure results associated with a given NCID are clinically comparable. The Data Standardization teams (also known as the data mapping teams) at Northrop Grumman and 3M collaborate to maintain the conceptual consistency of the NCIDs, mapping a new test at a site to the appropriate NCID(s), and/or creating new NCIDs as new concepts evolve. The lab teams include Medical Technologists as well as systems experts to evaluate both the clinical as well as the technical details of the concept under review.

    - **There have been issues with the Lab Results coming across the interface (such as missing or inappropriate Reference Ranges, Units of Reports, Amended Results, and Result Comments.)**

The above patient safety issues were addressed immediately, while requests for new system changes are still in development to be released in a future AHLTA update.

- **Does AHLTA have Voice to Text dictation capability?**

AHLTA does not have Voice to Text dictation capability today. However, commercial off the shelf software such as Dragon Naturally Speaking can be used to dictate into AHLTA.

Ophthalmology Functionality

- **When will the system adequately support the following capabilities for Ophthalmology?**

We have developed a drawing tool in the new AHLTA 3.3 application to support some of Ophthalmology needs. AHLTA 3.3 will be deployed to all sites by the end of this calendar year. The Program Office continues to work with the user community to close the functionality gap.

- **Capture and access to digital images or sketches?**

The capability to manage Artifacts and Images (A&I) is currently in development and is planned for deployment by the end of December 2009.

- **Visual display of information?**
    - **Users state the system does not support international ophthalmic notation conventions (ie, heiroglyphs). Users state AHLTA neither accepts them as input, nor displays them as output. Does not handle ophthalmic data as data. eg: vision is data. Intra-ocular pressure is data. Right eye movement= data. Left eye corneal findings = data. etc. Almost every item we put into a note can be thought of as data and should be handled that way and stored in a data cell. In that way, users feel they should be able to compare data and pre-populate notes. eg: if a person is anophthalmic OD, there's a pretty good chance that he'll remain anophthalmic od. That information should pre-populate tomorrow's note (as well as the dx section).**

We understand ophthalmology has unique needs for documentation. The Program Office continues to work with the user community to close the functionality gap.

- **Data comparison and manipulation?**
    - **Users cite need to compare data cells, set a comparison alarm, and display the alarm in red font, which will draw the doc's attention pretty quickly. Similarly, intraocular pressure (data) has to be programmable to set alarm levels ("target pressures") so that if today's pressure is higher than target but still within the "normal" range, it shows as an alarm (red font).**

We understand ophthalmology has unique needs for documentation. The Program Office continues to work with the user community to close the functionality gap.

- **Image management?**
    - **Users state that ophthalmology uses a lot of technology -- much of it is digital imaging (visual fields, corneal topography, fundus fotos, oct, ocular us, etc). Almost every instrument has digital output and almost every manufacturer provides HL-7 interface. They state they can neither capture, nor store the images digitally, nor scan the printout There is no ophthalmic PACS equivalent, but that is what is needed.**

The capability to manage Artifacts and Images (A&I) is currently in development and is planned for initial deployment by the end of December 2009. This will allow healthcare providers to register, query, retrieve, view, and retain A&I in a repository.

- **Data entry portals?**
    - **Users request touch screen, stylus, keyboard, and natural voice capable, not either/or, but inclusive. Should have hotlinks into the data cells. Should be on a tablet pc wirelessly connected to cpu so that the doc can chart while at the slitlamp area. A separate monitor on the cpu should have the historic data (old notes, fotos, images, visual fields, etc) which should be displayable as a 1-up or 4-up image, similar to xray.**

We will work with the functional community to evaluate multiple input / output methods to better support the medical workflow.

- **Support for drawing and graphics?**
    - **Users cite difficulty scanning into AHLTA: Scan size is exceptionally limited. Also, scanning into various locations is allowable (e.g., into addnote, into clinical notes). Users cite concern with how the next provider is to know where to look for the related images. Further, exceeding the maximum allowable scan creates need for initiating a second note, further complicating the future review of all related material collectively.**

The new AHLTA 3.3 application will provide smoother copying and importing into the record - even under current size constraints. The system will automatically convert it to the proper file type and compress it, if necessary. This enables many more images to easily be imported. AHLTA 3.3 will present a warning message to the user when an image exceeds the 500k limit. AHLTA 3.3 will be deployed to all sites by the end of this calendar year.

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<u>Emergency Department Functionality</u>

- **Why don't we use a next generation ER SOA product that can interoperate with AHLTA as a web service and provide the ER with a good chart, note and decision support tool?**

Many facilities are using the interim inpatient solution Essentris for their ER Documentation. We will continue to work with the user community to better meet the ER requirements.

CHANGE REQUESTS

- **Why aren't or can actual users participate in the validation of any proposed updates to AHLTA prior to expenditure of government funds to build capabilities that may not be needed or may not fulfill user requirements?**

- **It doesn't seem like the integration with multiple systems will be the most efficient way to continue, is a consolidated solution being explored?**

The MHS is developing a plan for a comprehensive EHR, which includes modernizing and/or replacing our legacy systems and architecture.